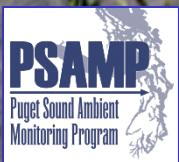


Nearshore Habitat Program

GIS Data and Activities

Aquatic Resources Division
Science Support Section



DNR's Nearshore Datasets

DNR 'core' data

1. 1995 Whatcom Area Intertidal Habitat Inventory
 2. 1996 Skagit Area Intertidal Habitat Inventory
 3. WA ShoreZone Inventory (2000)
-

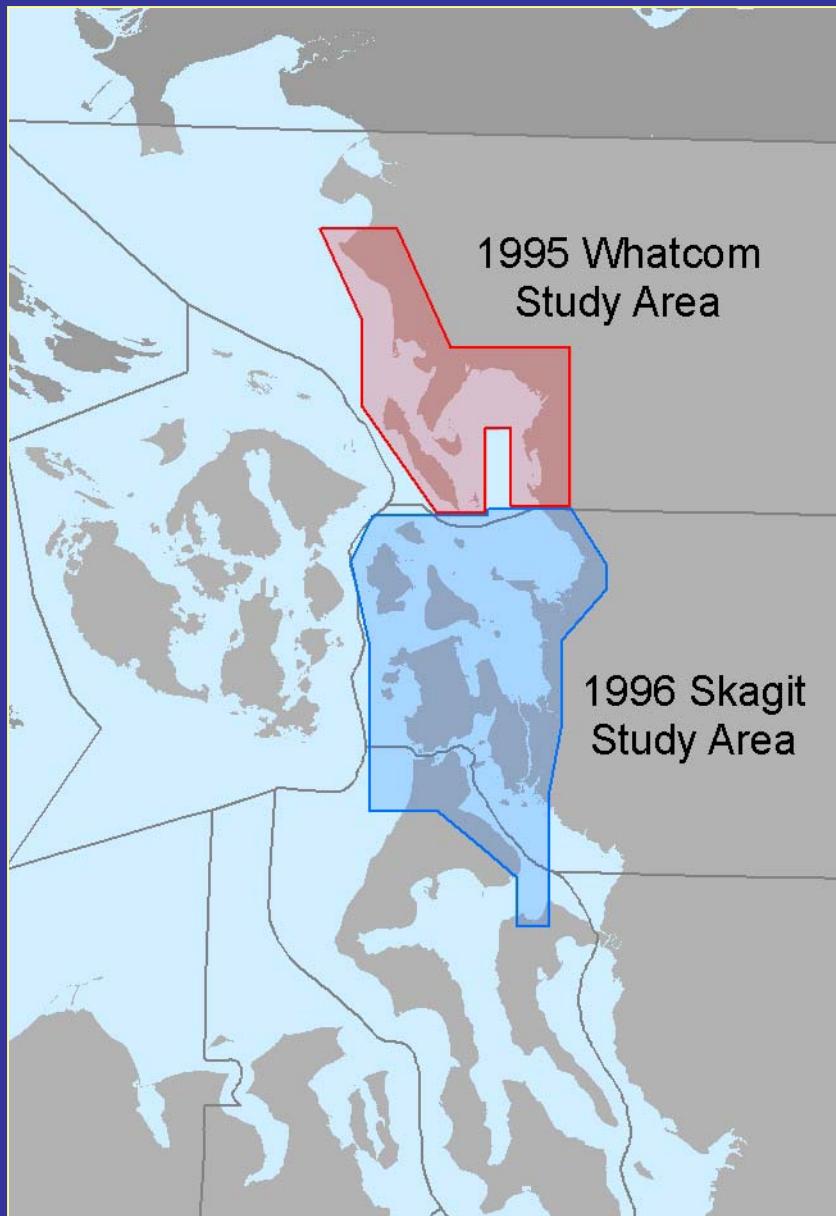
Kelp Monitoring Datasets

4. Olympic Peninsula (1989-2000+)
5. Greater Puget Sound (2004+)

Eelgrass Monitoring Dataset

7. Submerged Vegetation Monitoring Project
(2000-2004+)
-

Intertidal Habitat Inventories



CASI Multispectral Airborne Sensor (4 meter resolution)

Coverages

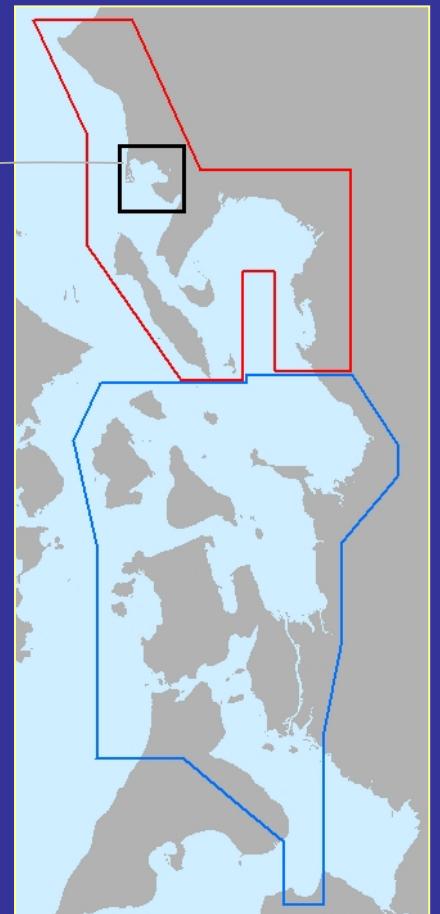
- Intertidal Vegetation
- Shoreline Characteristics
(sand/cobble, open/protected)

GRIDs (4 meter resolution)

- Intertidal Vegetation
- Raw Band 2 Imagery
(green-yellow band)

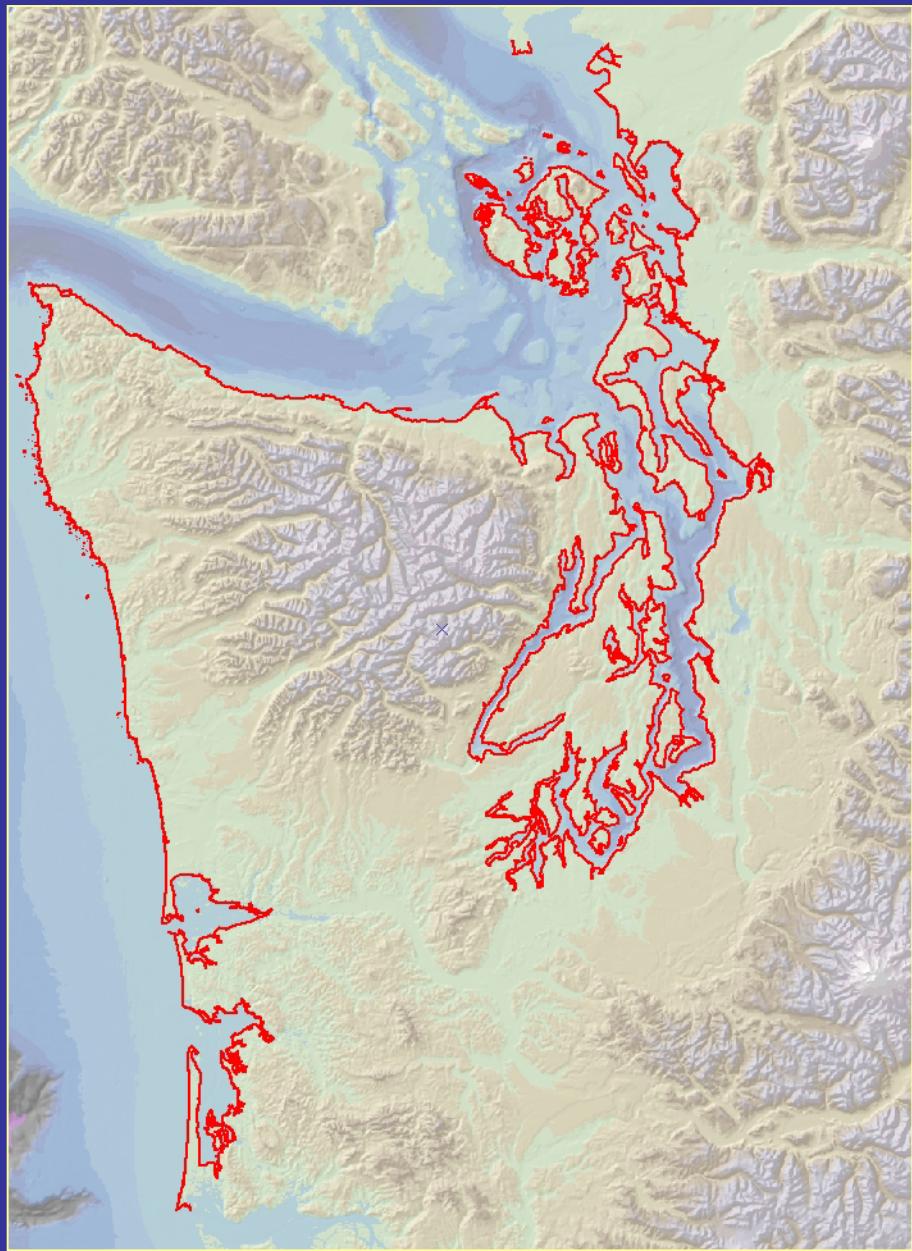
Example Data

1995 Whatcom Intertidal Vegetation

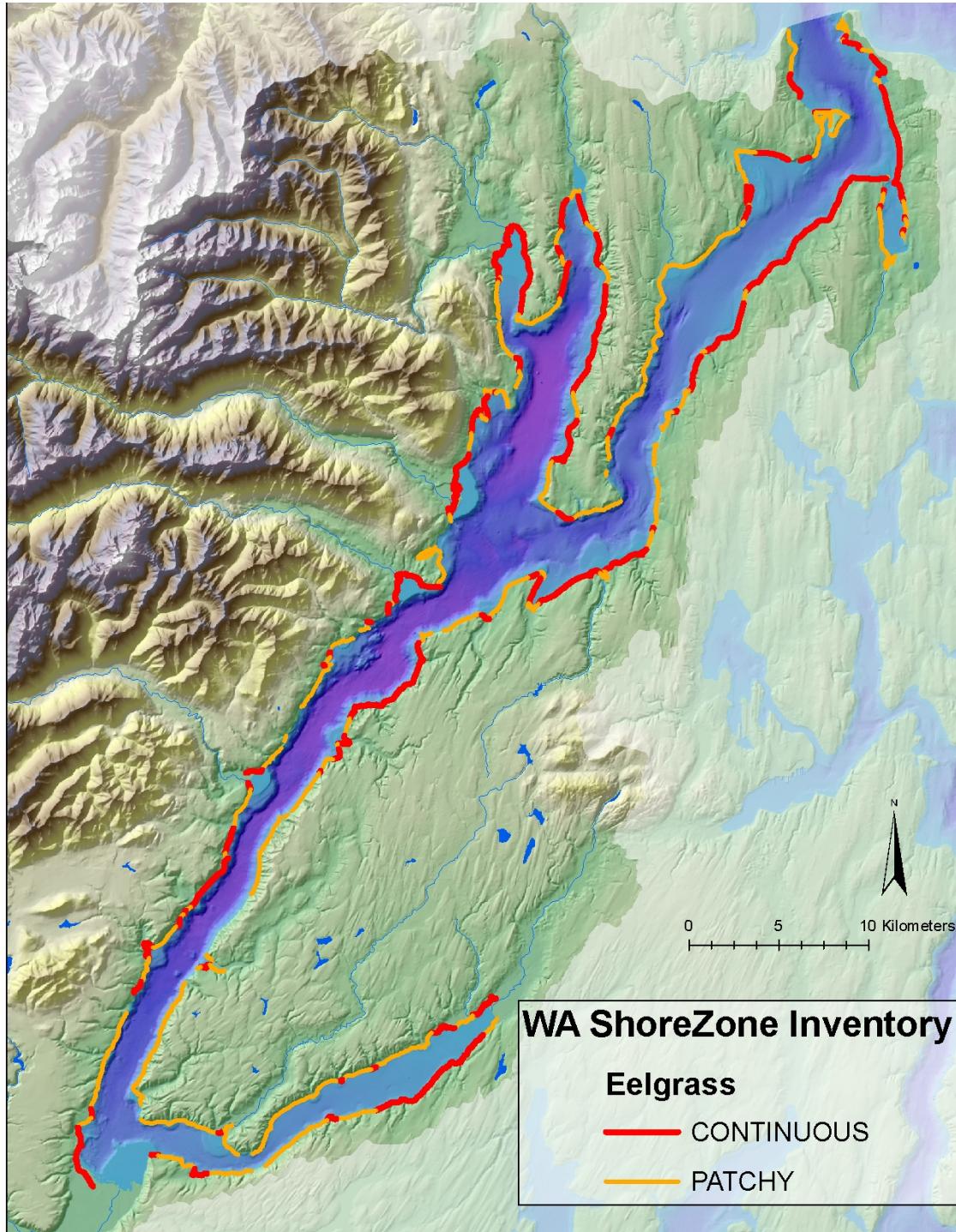


- Eelgrass
- Brown Algae
- Green Algae
- Kelp
- Mixed Algae
- Salt Marsh
- Spit/Berm Vegetation

WA ShoreZone Inventory



- All WA marine shorelines
 - Helicopter-based survey
 - Physical Variables
 - bulkheading
 - sediment variables
 - energy/exposure
 - Biological Variables
 - Vegetation Types
(continuous, patchy, absent)
-
- shapefiles (line, polygon, point)
 - cross-shore dbf tables



Example Data ShoreZone

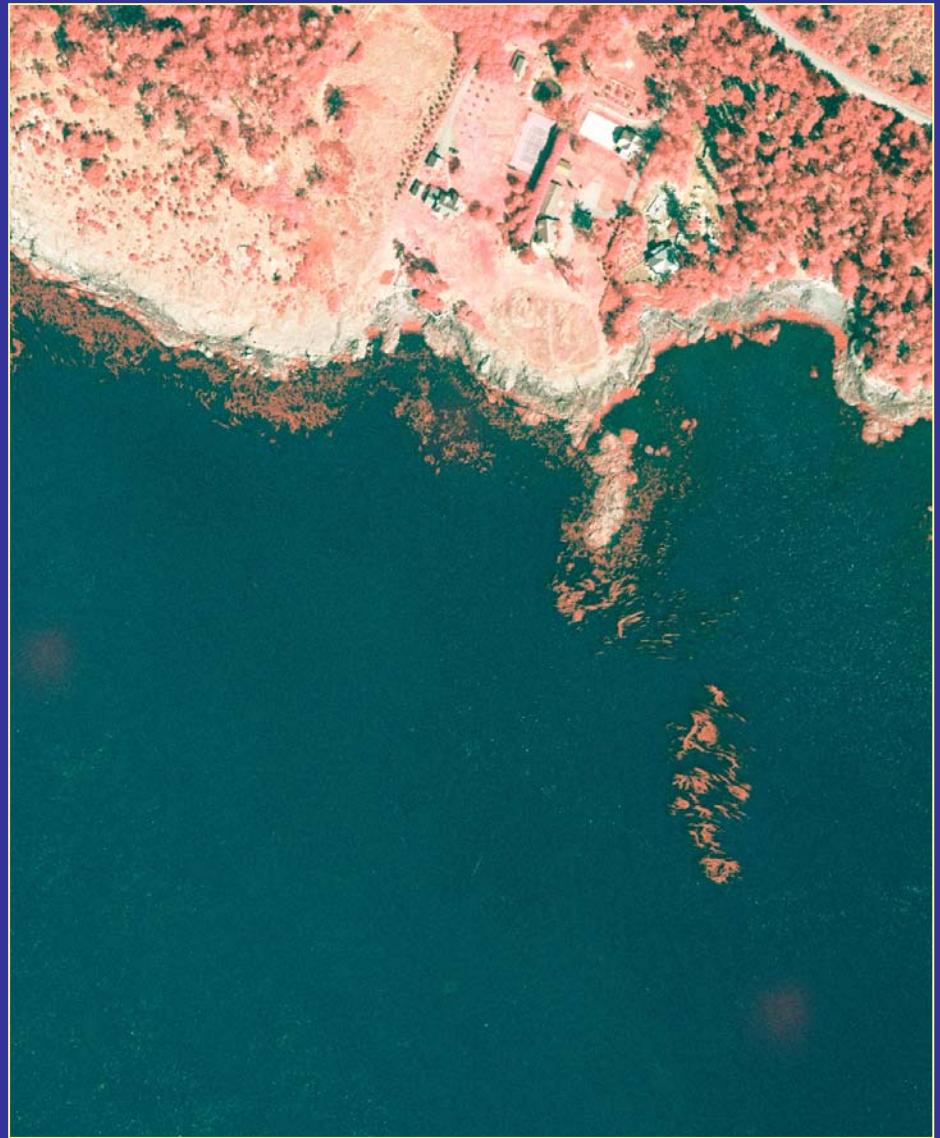


DEM: D.P. Finlayson, 2005, University of Washington

Kelp Monitoring

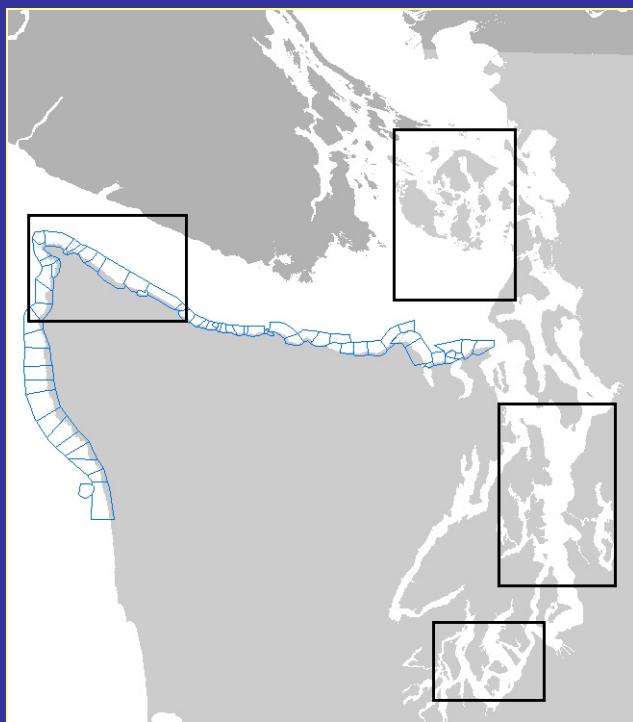


Nereocystis luetkeana (Bull Kelp)



Color Infrared Aerial Photography

Kelp Monitoring



1. Olympic Peninsula 1989-2000+

shapefiles → geodatabase

Partners: Olympic Coast NMS
Ecoscan

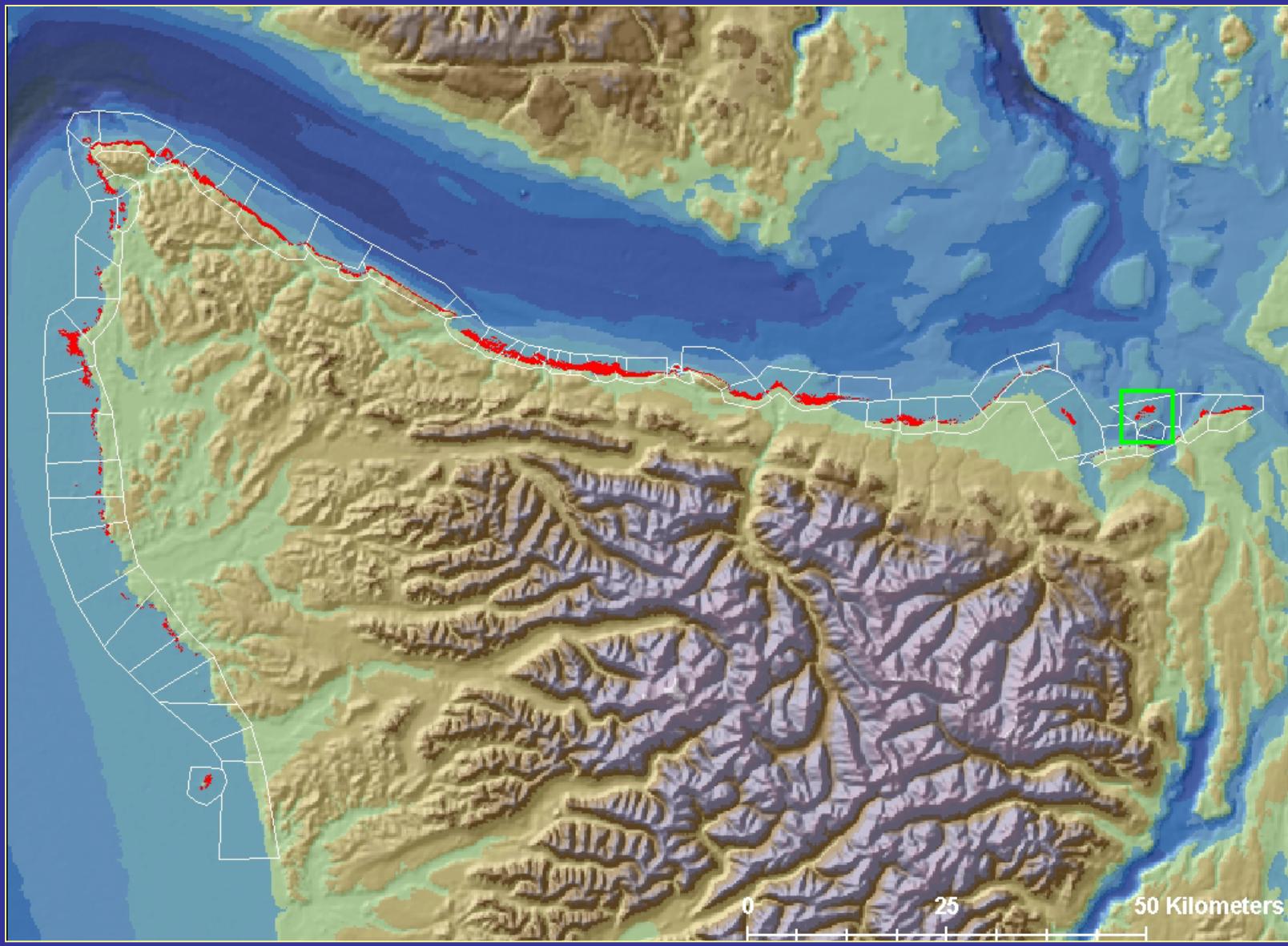
2. Greater Puget Sound 2004+

Erdas Imagine

Partners:
DNR Photogrammetry

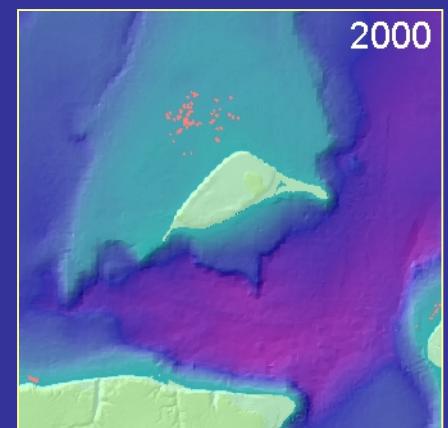
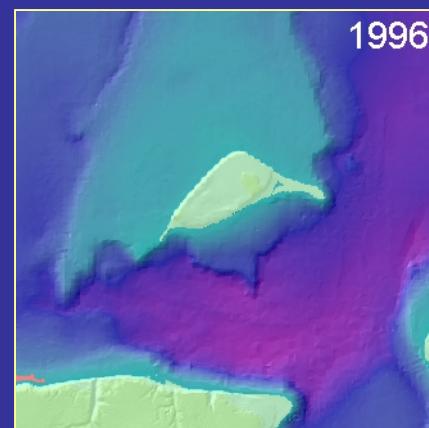
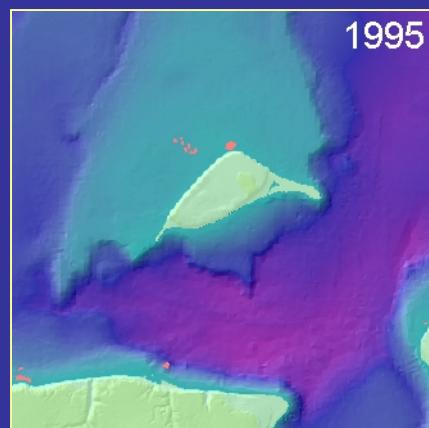
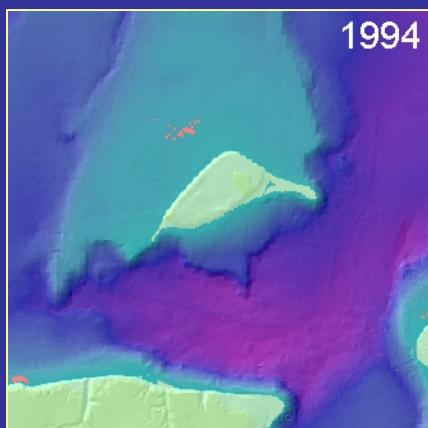
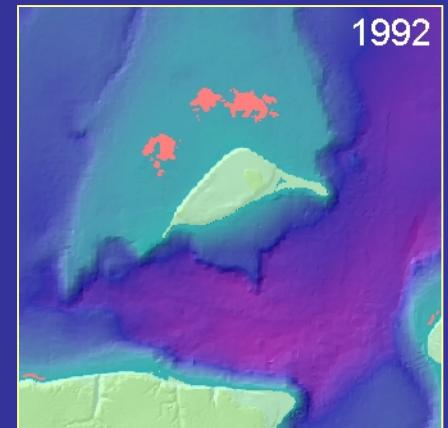
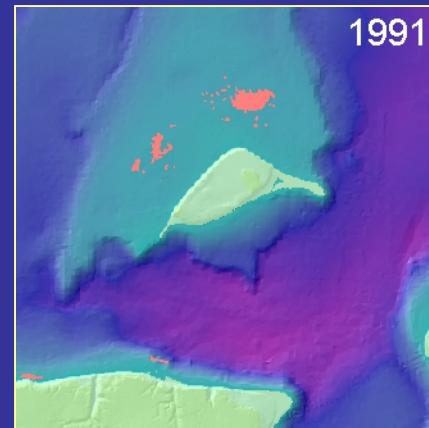
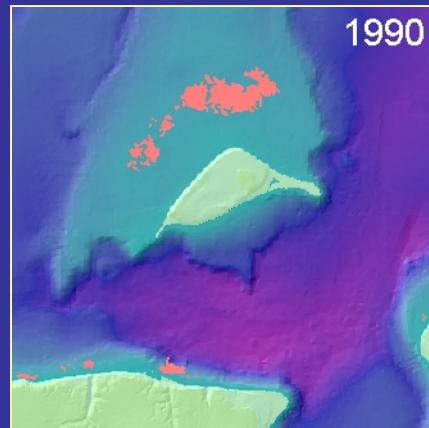
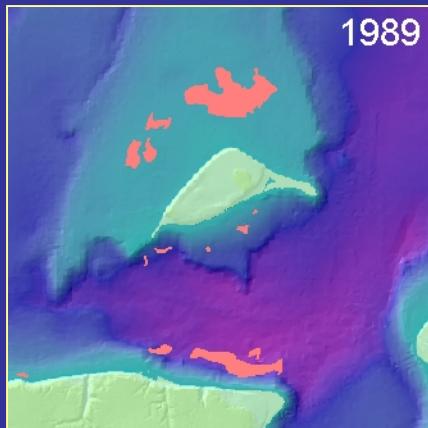
Kelp - Olympic Peninsula Dataset

1989-2000+



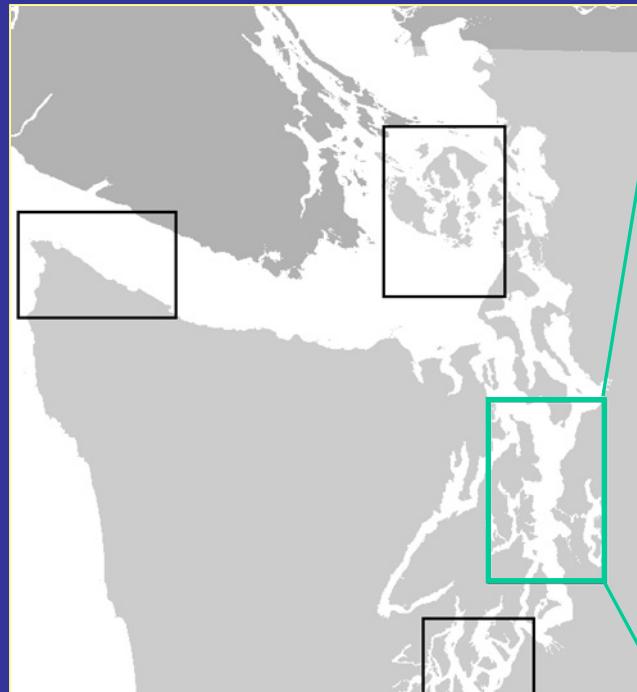
DEM: R. Haugrud, USGS

Changes in Kelp, 1989-2000 Protection Island

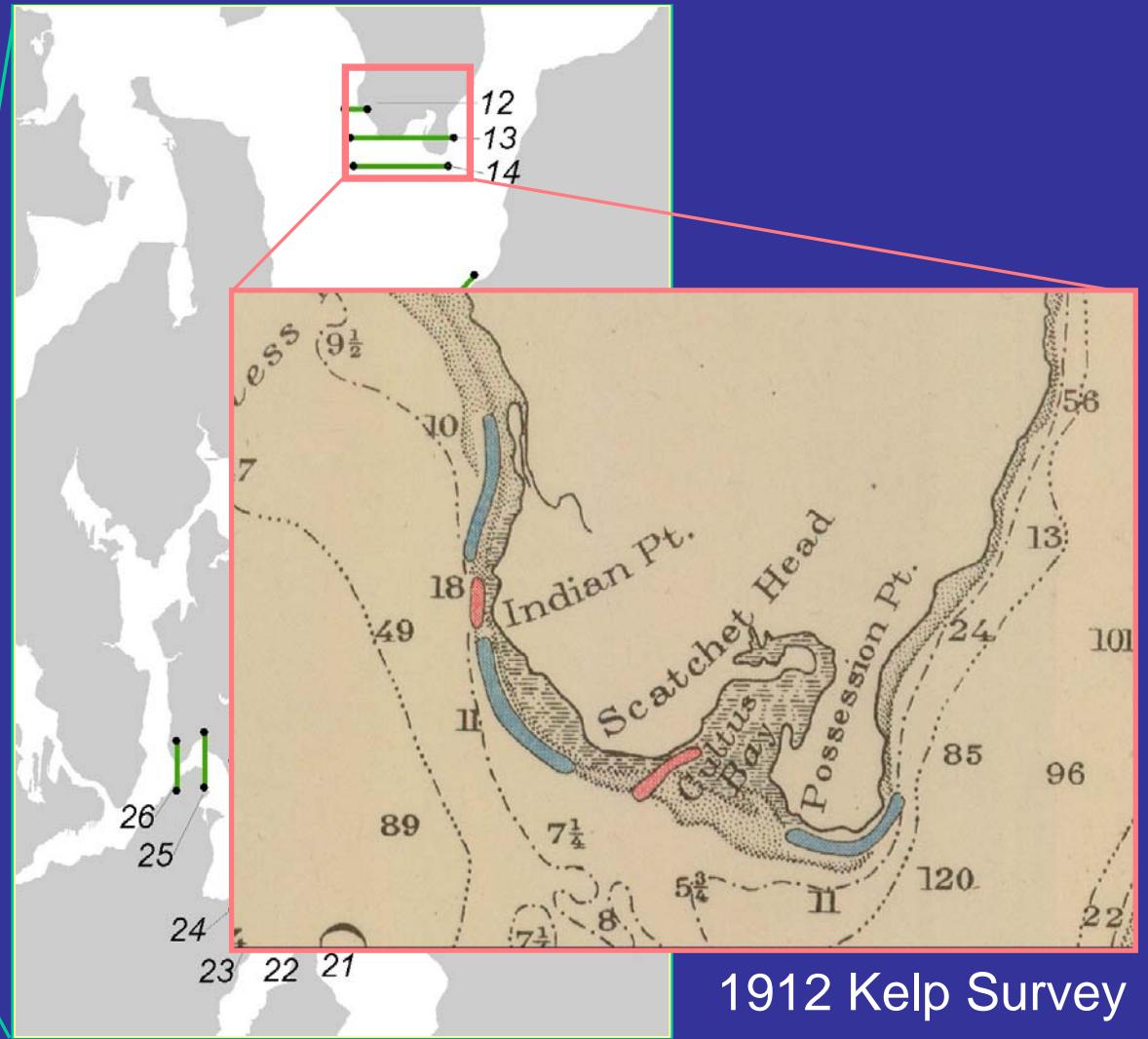


0 5 km

Kelp – Greater Puget Sound (2004+)



2004 Study Areas



Flight Lines

Eelgrass Monitoring

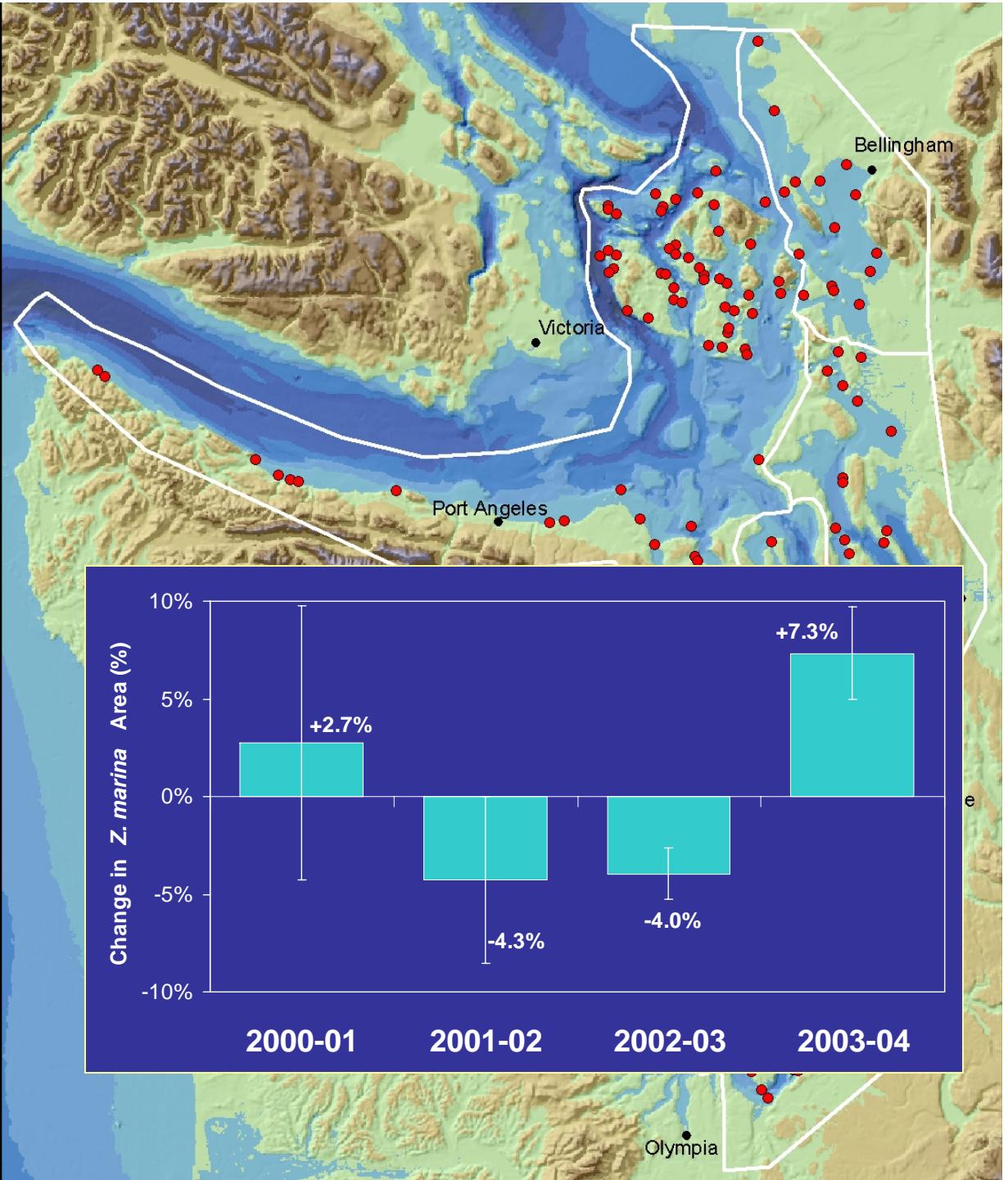
Submerged Vegetation
Monitoring Project

Partners:

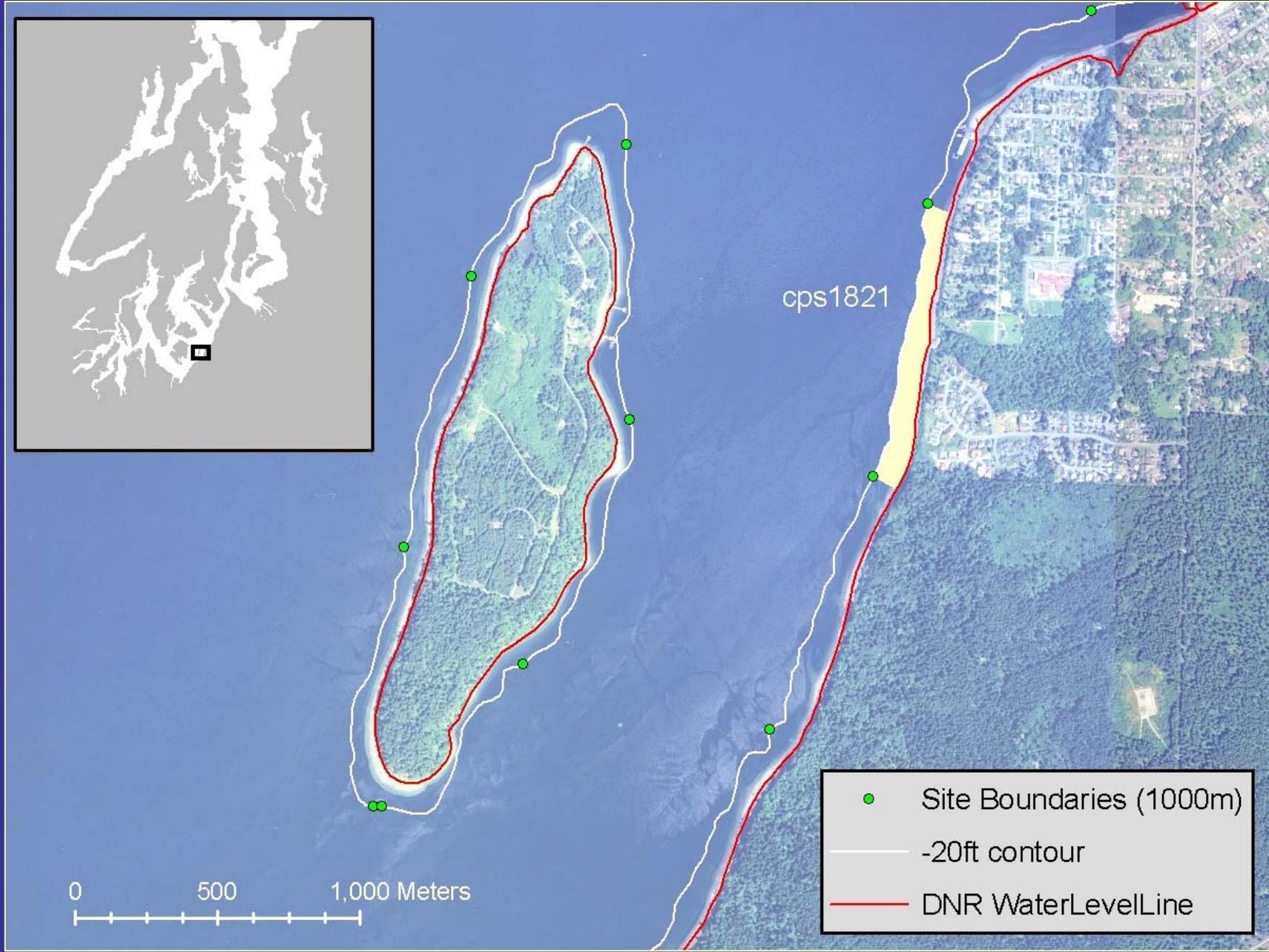
University of Washington
Marine Affairs
Aquatic & Fisheries Sciences
Marine Resource Consultants

2000-2004
Sample Sites

DEM: R. Haugrud, USGS

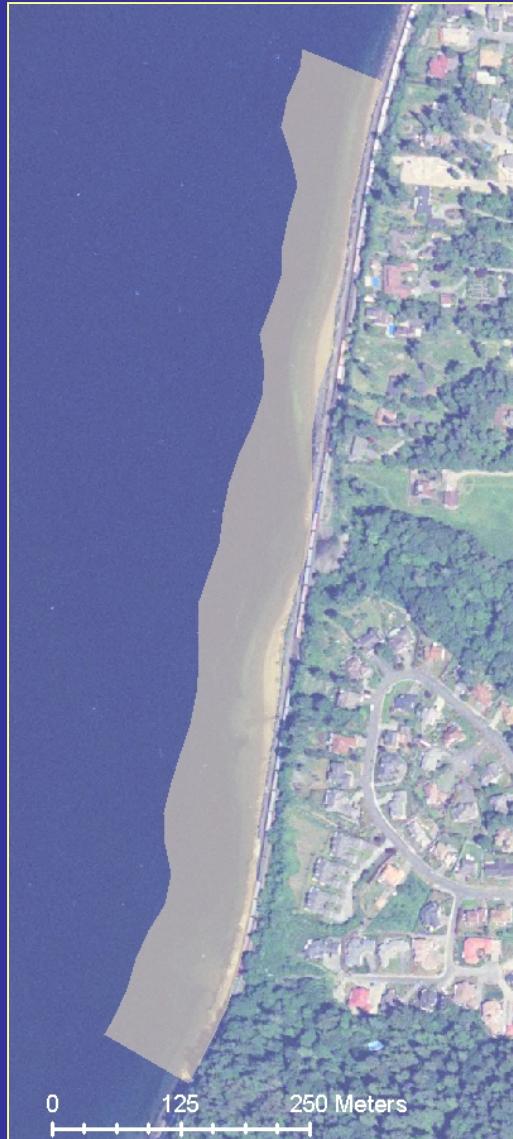


Eelgrass Monitoring – Study Design



Eelgrass Monitoring 2004

cps1821



Public

Data Access

core datasets

- free data download

other data

- upon request

DNR

core datasets

- \\snarf\bss3\gis_data
- Quick Data Loader (soon?)
- ROPA (future)

other data

- contact us
- kelp distribution ready soon (1989 – 2004)